REMARKS/ARGUMENTS

This paper is submitted in response to the office action mailed October 29, 2004, in which all of the pending claims (i.e., claims 1-21, 23, and 24) were rejected. The application has been amended, and reconsideration is respectfully requested.

Claims 1-21, 23, and 24 were rejected as unpatentable over one or more of the following references: US 5,439,321 – Hunter; US 4,913,238 – Danazcko et al.; US 6,712,560 – Cottrell; and US 4,606,673 – Daniell. All of these claims have been cancelled and replaced by new claims 25-44. Of these references, Hunter and Daniell were the primary references, and Danazcko et al. and Cottrell were the secondary references. As explained below, it is respectfully submitted that claims 25-44 define patentably over the art of record.

New independent claim 25 defines a semi-submersible platform, comprising a semi-submersible hull supported on a submersible base and supporting a deck structure, wherein an upper guide assembly is provided in the deck structure, and a lower guide assembly is provided in the base. A buoyancy apparatus, having a well deck on its upper surface, is guided within the upper and lower guide assemblies, and at least two top-tensioned vertical risers extending from the seabed through the buoyancy apparatus to the well deck. As further recited in claim 25, contact loads between the buoyancy apparatus and the upper and lower guide assemblies provide a restoring moment to the platform in response to pitching motions of the platform.

It is respectfully submitted that the prior art of record neither teaches nor suggests the combination defined in claim 25. Specifically, Daniell relates to a spar buoy, not a semi-submersible platform, as defined in the claim. Accordingly, Daniell does not teach a semi-submersible hull supported on a submersible base and supporting a deck structure, with a buoyancy apparatus guided within an upper guide assembly in the deck structure and a lower guide assembly in the base. In fact, the buoyancy apparatus (float 92, Figs. 7 and 10) is maintained below the level of the deck or platform 28, and thus cannot be guided within it. Indeed, there is no suggestion of any guide assemblies for the buoyancy device, either within the deck 28 or within the ballasted base 38 of the device.

While Hunter relates to a semi-submersible platform, there is no suggestion that the buoyant tension leg wellhead platform (TLWP) 24 that is supported underneath the deck of the semi-submersible platform is in any way guided within the deck or base of the semi-submersible structure. The TLWP is maintained below the level of the semi-submersible platform beck, and

thus cannot be guided within it. The only connection between the TLWP and the semi-submersible structure is a mooring system using cables 74. There are no guide assemblies, as defined in claim 25, and there is no suggestion of any structure that would allow contact loads between the buoyant TLWP and the semi-submersible platform to provide a restoring moment to the platform in response to pitching moments, as defined in claim 25, and as explained in the specification at page 15, paragraph 0056.

The secondary references likewise do not teach or suggest the invention of claim 25. In Danazcko et al., a buoyant tension leg platform (TLP) 4 is maintained below the level of the deck 6 of the semi-submersible structure. There is thus no suggestion of any guide assembly in the deck within which the TLP would be guided. Likewise, in Cottrell, the buoyant structure 45 is maintained below the deck, and there is no suggestion of either an upper guide assembly in the deck or a lower guide assembly in the submerged base of the platform. It is therefore respectfully submitted that claim 25 defines patentably over the art of record, and should be allowed.

New claims 26-31 depend from claim 25 and further define, with greater particularity, the novel features of the invention. Specifically, claims 26, 29, 30, and 31 define the riser and tendon assemblies employed in the invention of claim 25, while claims 27 and 28 further define the buoyancy apparatus of the novel combination defined in claim 25. Therefore, it is respectfully submitted that claims 26-31 should be allowed along with claim 25.

New independent claim 32 defines a riser system for use in a floating offshore platform, wherein the platform defines a centerwell having an upper portion and a lower portion. The riser system comprises an upper guide assembly in the upper portion of the centerwell and a lower guide assembly in the lower portion of the centerwell, with a buoyancy apparatus guided and constrained by the upper and lower guide assemblies. A well deck is provided on the upper surface of the buoyancy apparatus, and at least two vertical risers supported by the buoyancy apparatus are attached to the well deck and extend through the buoyancy apparatus for connection to a seabed wellhead. A tendon assembly extends through the buoyancy apparatus and secures the buoyancy apparatus to the seabed. The claim further recites that contact loads between the buoyancy apparatus and the upper and lower guide assemblies provide a restoring moment to the platform in response to pitching motions of the platform. It is respectfully submitted that the prior art of record neither teaches nor suggests the combination of features,

elements, and limitations defined in claim 32.

Specifically, as mentioned above, none of the cited references defines a platform having upper and lower guide assemblies in which a buoyancy apparatus is guided and constrained. Furthermore, none of the references suggests that a buoyancy apparatus can be guided and constrained within the centerwell of a floating platform so that contact loads between the buoyancy apparatus and the guide assemblies provide a restoring moment to the platform in response to pitching motions of the platform. It is therefore respectfully submitted that claim32 defines patentably over the art of record and should be allowed.

New claims 33-38 depend from claim 32 and further define, with greater particularity, the novel features of the invention. For example, claims 33, 36, 37, and 38 further define the riser and tendon assemblies employed in the invention of claim 32, while claims 34 and 35 further define the buoyancy apparatus of the novel combination defined in claim 32. Therefore, it is respectfully submitted that claims 33-38 should be allowed along with claim 32.

New independent claim 39 defines a floating platform having an outer hull defining a centerwell, in which a buoyancy apparatus is guided and constrained by upper and lower guide assemblies within the centerwell. A tendon assembly passes through the buoyancy apparatus and secures the buoyancy apparatus to the seabed, and a plurality of risers passes through the buoyancy apparatus and extends to a seabed wellhead. A riser guide within the buoyancy apparatus couples the risers to the tendon assembly in a spaced-apart relationship.

It is respectfully submitted that the prior art of record neither teaches nor suggests that structure defined in claim 39. Specifically, as discussed above, none of the references discloses a buoyancy apparatus that is guided and constrained by upper and lower guide assemblies within a centerwell. Furthermore, the art of record does not teach or suggest a buoyancy apparatus that is thus guided and constrained, and that also has both tendons and risers passing through it, with the tendons and risers being coupled together in a spaced-apart relationship by a riser guide within the buoyancy apparatus. Therefore, it is respectfully submitted that new claim 39 defines patentably over the art of record and should be allowed.

New claims 40-44 depend from claim 39 and further define, with greater particularity, the novel arrangement of the risers, the tendon assembly, and the riser guide employed in the invention of claim 39. Therefore, it is respectfully submitted that claims 40-44 should be allowed along with claim 39.

In summary, it is respectfully submitted that new claims 25-44 define patentably over the art of record, taken singly or in any combination that might suggest itself to those of ordinary skill in the pertinent arts. Allowance of these claims is respectfully requested, and passage of the application to issue is earnestly solicited.

Respectfully submitted,

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